AN INTENSIVE ARCHAEOLOGICAL SURVEY OF USX-EAST

by

Christopher Raven

Intermountain Research Job. No. 636-S Cultural Resources Use Permit No. N-39918

Prepared for: Galactic Services, Inc.

5250 S. Virginia, Suite 300

Reno, Nevada 89502 Attn: Jack Clark

Prepared by:

Intermountain Research

P.O. Drawer A

Silver City, Nevada 89428

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INTERMOUNTAIN RESEARCH REPORTS



Areal/Intensity Data: The project study area encompasses ca. 160 acres. The entire area was surveyed for cultural resources at 30 meter transect intervals. South of the principal east-west drainage, survey was accomplished in 38 linear north-south transects; on steep slopes north of the drainage (ca. 12 acres), 5 contour transects were surveyed.

<u>Project Description</u>: Galactic Services, Inc., proposes to develop ore processing facilities (crusher, leach pads, topsoil stockpile) for its USX Mine. Additional support facilities, including leachate collection ditches, a surface diversion ditch, and a network of 30 ft. wide access roads, are planned. As presently designed, direct surface disturbance would be confined (with a one-acre exception) to that portion of the project area lying south of the east-west drainage.

Statement of Purpose: Archaeological survey of the U.S. Steel West project area was conducted and reported by Budy (1988); since the present facilities are ancillary to that project, the present report constitutes an addendum to Budy's documentation, reporting the results of additional survey. Pains were taken to ensure that field survey methods, manner of recording, and site evaluation procedures were strictly comparable between the two studies in order to facilitate planning coordinated programs of archaeological testing and data recovery in both project areas.

<u>Project Personnel</u>: Survey was conducted by Christopher Raven and Kenneth E. Juell. Subsequent to survey, Juell finalized IMACS site forms while Raven calculated significance evaluation scores and prepared this report.

Cultural Resources Use Permit No.: N-39918 (expires 9/30/90).

Agency Notification: Mr. Stanley Jaynes, Elko District Office, Bureau of Land Management, was consulted regarding survey of the project area, and was notified prior to the survey party entering the field.

Dates of Field Examination: April 6-12, 1988.

Date of Report: April 25, 1988.

Map Reference: USGS Willow Cr. Reservoir SE 7.5' (1965).

<u>Legal Description</u>: T37N, R48E:

Section 3: S 1/2 of NW 1/4 of SW 1/4

SW 1/4 of SW 1/4

NW 1/4 of SE 1/4 of SW 1/4

Portions of SW 1/4 of NE 1/4 of SW 1/4 Portions of NE 1/4 of SE 1/4 of SW 1/4 Portions of SW 1/4 of SE 1/4 of SW 1/4

Section 4: SE 1/4 of SE 1/4 of SE 1/4

E 1/2 of SW 1/4 of SE 1/4

Portions of SE 1/4 of NW 1/4 of SE 1/4 Portions of S 1/2 of NE 1/4 of SE 1/4

Section 9: Portions of NE 1/4 of NW 1/4 of NE 1/4

Portions of SE 1/4 of NW 1/4 of NE 1/4
Portions of NW 1/4 of NE 1/4
Portions of NW 1/4 of NE 1/4
Portions of NE 1/4 of NE 1/4

Portions of NE 1/4 of NE 1/4 of NE 1/4

Section 10: Portions of NW 1/4 of NW 1/4 of NW 1/4

Portions of NE 1/4 of NW 1/4 of NW 1/4

Relationship to Cadastral Markers: A USGS section-corner brasscap (Sections 3, 4, 9, 10; T37N, R48E) was observed in the southern half of the central project area.

Area and Environmental Setting: The environment of the project vicinity has been sketched by Elston, Raven, and Budy (1987), with amplifications by Budy (1988); the following description relates specifically to the U.S. Steel East project area.

The area is bounded on the northeast by the deep canyon of Little Antelope Creek, a major seasonal drainage. From this base, at elevation 5580 feet amsl, the project area rises gradually to the southeast across a series of slightly dissected slopes, ridges, and knolls, achieving an elevation of 5800 feet at its southern margin. Its northern periphery encompasses the meandering gorge of an unnamed seasonal drainage that flows west into Little Antelope Creek. No permanent waters rise within or cross the area.

The northern half of the study area exhibits abundant outcrops and nodule deposits of the silicified cryptocrystalline rocks exploited prehistorically as toolstone and identified archaeologically as Tosawihi chert or opalite

(Rusco 1976, 1979; Budy 1988; Elston et al. 1987). The material is visually indistinguishable from the toolstone quarried within the Tosawihi Quarries (26Ek3032) immediately to the northeast. As the slopes rise in the southern half of the study area, the mineralogy begins to be dominated by rhyolitic exposures and the incidence of opalite declines rapidly.

Vegetation is composed of an intricate mosaic of big sage and low sage communities, the former dominating northern slopes and zones of deeper soils, the latter occurring principally in areas of surface or near-surface bedrock. Both communities include rabbitbrush, as well as grass components including Great Basin wildrye, bluebunch wheatgrass, and squirreltail. Phlox is a frequent member of the low sage community, and bitterbrush occurs infrequently along the rims of the drainage gorge.

Rabbits were noted during survey, as were evidences of badgers, pack rats, and marmots. The occasional presence of antelope and mule deer is inferred.

Review of Existing Information: Details of the regional prehistory of the project vicinity have been summarized by Elston et al. (1987) and Budy (1988) with specific reference to the chronology, exploitation, and archaeological distribution of Tosawihi opalite. These studies, together with previous research by Rusco (1976, 1978, 1979), conclude that white cherts apparently originating in the Tosawihi Quarries have been significant components of the lithic profiles of assemblages in central northern Nevada for as long as the past 8000 years.

Intensive survey of the Tosawihi Quarries immediately northeast of the project area resulted in the recording of 219 prehistoric localities consisting chiefly of quarry-related features, lithic reduction areas, residential localities, and rockshelters (Elston et al. 1987). Additional survey of the U.S. Steel West project area, ca. 0.4 mi. due west of the present project area, resulted in the recording of 124 archaeological sites, chiefly quarry-related features, reduction stations and complexes (some with possible residential functions), small sites, and isolated artifacts.

Ethnographic patterns of the Tosawihi ("White Knife") Shoshone living along the Humboldt River and exploiting the Tosawihi Quarries in the historic period have been sketched by Elston et al. (1987); greater detail is presented by Steward

(1938) and Harris (1940), but little information is available on actual aboriginal presence in the vicinity of the study area.

The <u>history</u> of mercury mining in the Ivanhoe Mining District, occurring sporadically between 1911 (the date of initial discovery) and 1966, has been summarized by Zeier (1987) in the context of an intensive reconnaissance and evaluation of historic resources in the Tosawihi Quarries Archaeological District.

Search of the current cultural resource records of the Bureau of Land Management, Elko District Office, as well as those of the Nevada State Museum, indicate that no prior cultural resource surveys have been performed in the project area, nor have any cultural sites been recorded previously therein.

National Register Review: Archaeological site 26Ek3032 (Tosawihi Quarries) is considered eligible for inclusion on the National Register of Historic Places (Intermountain Research 1987). Additionally, of the 124 sites recorded in the U.S. Steel West project area, 79 are regarded as potentially eligible for National Register consideration pending further assessment (Budy 1988).

Methods: The surface of the project area was scrutinized by a two-member survey team that transected the entire area at 30 meter intervals. The zone south of the drainage gorge was surveyed in 38 linear north-south transects, while that north of the gorge was surveyed in 5 contour transects. Locational control was maintained by reference to topographic features, mapped cultural features (roads, a corral, drill sites), a section-corner brass cap, and an intermittently-staked 400 foot grid surveyed by Touchstone Resources over the western one-third of the project area.

Upon detection, sites were recorded on IMACS site forms (Appendix B) and their boundaries were plotted on 1:6000 (lin. = 500 ft.) topographic maps supplied by Galactic Services. The western half of the project area had been mapped at 5 foot contour intervals, allowing somewhat greater precision in plotting site locations than in the eastern half, where field maps were based on USGS 20 foot contour mapping. To assist in relocating sites in the field, each site was marked with a yellow pin flag inscribed with a temporary site number.

Collection of specimens was limited to chronologically diagnostic projectile points (n=3) and a single fragment of an

apparently finished Stage III biface. In each instance the location of collected specimens was noted and the position flagged on the ground for later instrument mapping.

Results of Reconnaissance: Survey of the U.S. Steel East project area resulted in the detection and recording of 37 previously unrecorded archaeological sites; no historic sites were observed within the project area, although a number of minerals exploration features (bulldozer scrapes) were observed throughout and a vertical shaft was noted at the western extreme.

Sites were classified according to criteria employed by Elston et al. (1987) and Budy (1988); the resulting typology (Table 1) segregates site types by abundance and diversity of tools and debitage, spatial patterning, occurrence of toolstone, and overall site morphology. Seven site types have been discriminated.

Table 1. Summary of Site Classification.

Site Type	n	% of Total
Quarry pit/reduction complex	5*	13.5
Outcrop quarry/reduction complex	5	13.5
Large reduction complex	4	10.8
Small reduction complex	5*	13.5
Reduction station	10	27.0
Diffuse lithic scatter	3	8.1
Rockshelter	5*	13.5
Total	37	99.9

^{*1} site with possible residential function

The site typology adopted here reflects apparent dominant site function as inferred from surface examination, and necessarily subsumes a range of variation within each site type; too, certain attributes appear in more than one site type, but have not been used to define additional types at this point because their occurrence is infrequent and requires further assessment. Thus, one example each of our quarry pit/reduction complexes, small reduction complexes, and rockshelters exhibits an assemblage diversity (including isolated specimens of ground stone) that suggests possible residential function. In all such cases, however, the evidence for residentiality is sparse, and awaits testing.

Attributes of each site type are discussed below.

Quarry Pit/Reduction Complexes

Quarry pit complexes occur throughout the northern half of the project area, in areas where the availability of toolstone is evident in surface or near-surface contexts; in three instances the sites exhibit bedrock outcrops of toolstone-quality opalite in the near vicinity of quarry pits. Each site contains 2-5 quarry pits, 3-8 m in diameter and 10-20 cm in depth. The contents of the pits consist chiefly of opalite cobbles, cores, and shatter, with relatively low incidences of bifaces and secondary debitage. Chippage tends to be variably denser immediately outside the pits, and each site contains often numerous concentrations of reduction debris. Table 2 summarizes the principal attributes of the type.

Table 2. Attributes of Quarry Pit/Reduction Complexes.

Site	Area (sq. m)	No. of Pits	Debitage densi (Max/sq. m)	ty Outcrops
26Ek3170	36,500	2	300	•
26Ek3171	4,700	2	300-500	_
26Ek3195	6,600	5	500	3 low quality bedrock exposures
26Ek3197	1,400	3		Rimrock of brecciated opalite
26Ek3200	950	3		Small exposures at 1 pit

Site 26Ek3170 is distinguished from other sites of the type by its very great size and by its proximity to habitation localities 27 and 28 in the Tosawihi Quarries (26Ek3032) reported by Elston et al. (1987). While beyond the boundaries of the present project area, the nearer of these habitation areas (Locality 27) lies only 60 m north of 26Ek3170, separated from it by a slight increase in slope gradient. It seems likely that activities at 26Ek3170 were related to the occupation of Locality 27, especially in light of a mano recorded within the site precinct; if, in fact, the site represents a special activity area ancillary to a residential locus, the site may prove with further study to exhibit a greater degree of complexity than that which characterizes other quarry pit/reduction complexes.

Outcrop Quarry/Reduction Complexes

Confined to the rims and knolls overlooking the drainage gorge in the northeastern portion of the project area, five localities contain outcrops and bedrock exposures of toolstone-quality opalite that served as sources of lithic raw material. Evidence of prehistoric utilization consists of battering on exposed surfaces, an abundance of shatter, and a moderate incidence of primary debitage and cores. Concentrations of debitage occur in the vicinity of most of the outcrops, and in three instances multiple discrete lithic reduction areas are discernible. Characteristics of the type are given in Table 3.

Site	Area (sq. m)	Debitage density (Max/sq. m)	Outcrops	Discrete Stations
26Ek3191	8,500	5	Bedrock exposure; light use	•
26Ek3193	2,700	200	Small bedrock exposure; light use	3
26Ek3196	11,700	300	Large rim; heavy use	Several
26Ek3201	1,900	300	Bedrock and rim; moderate use	Several
26Ek3203	5,500	200	Bedrock and rim;	•

Table 3. Attributes of Outcrop Quarry/Reduction Complexes.

The low density of debitage and lack of discrete reduction stations at site 26Ek3191 owes to the diminutive size of the outcrop; much of the debitage encompassed by the site boundary seems less a function of the presence of the outcrop than of the incidence of a diffuse field of cobbles that has surfaced from bedrock origins and that provided prehistorically a dispersed zone of isolate source material that sometimes was assayed, and sometimes was reduced further on the spot. The other sites reflect rather enthusiastic exploitation of the toolstone sources that they offered, and hold within their precincts various areas within which the material was further reduced.

Large Reduction Complexes

Four large sites (area >2000 sq. m) in the northern half of the project area consist of flat or gradually sloping knoll tops or shelves punctuated by six to more than twenty discrete

clusters of secondary debitage, with the frequent occurrence of cores and Stage I and II bifaces and the occasional occurrence of other formed artifacts. None exhibits a lithic source within its precincts, although all are proximal (<150 m) to quarry pits or outcrops. They apparently represent clusters of reduction stations, their use conditioned by nearness to sources of raw material and topographic convenience. Their attributes are summarized in Table 4.

Table 4. Attributes of Large Reduction Complexes.

Site	Area (sq. m)	Debitage density (Max/sq. m)	No. of Loci	c	A r BI		a c t BIII	s Other
26Ek3184	12,850	300	20+	20	X	Х		3
26Ek3190	2,850	100	6	-	6	4	-	1
26Ek3192	2,100	200	7	5	15	4	-	1
.26Ek3198	5,650	200	12	5	20	10	4	1

C = Core BIII = Stage III Biface

BI = Stage I Biface X = Many present, not counted

BII = Stage II Biface

Site 26Ek3184 occupies the entire crest of a broad ridge that descends to the major drainage channel. Its great abundance of discrete reduction loci is unique among the sites considered here, a function perhaps of its proximity to 26Ek3170 and the slightly downstream habitation localities (27 and 28) of the Tosawihi Quarries. Exhibiting fewer discrete loci but a greater incidence of formed tools is 26Ek3198, which occupies a knolltop location central to three major quarrying sites (cf. map); it probably served as a general area in which to reduce materials collected at all three sources.

Small Reduction Complexes

Several microtopographic flats in the western half of the project area appear to have functioned similarly to large reduction complexes, but, owing to topographic constraints or greater distance from material sources, were less used.

Consequently, they exhibit fewer discrete flaking loci, less dense concentrations of debitage, and generally less diverse artifact assemblages. Table 5 summarizes their distinctive features.

Table 5. Attributes of Small Reduction Complexes.

Site	Area (sq. m)	Debitage density (Max/sq. m)	No. of Loci	C	A r BI	t i f BII	a c t BIII	s Other
26Ek3172	700	20	3	-	1	-		-
26Ek3173	160	100	3	-	1	-	-	-
26Ek3185	240	100	3	1	2	1	1	3*
26Ek3188	240	50	6	-	1	-	-	-
26Ek3189	120	50	3	2	2	-	-	-

C = Core

BIII = Stage III Biface

BI = Stage I Biface

* Groundstone

BII = Stage II Biface

The assemblage diversity of 26Ek3185 merits although neither density of debitage nor number of discrete loci distinguish it from other small reduction complexes, contains finished tools (including a Desert uniquely notched projectile point) as well as two fragments of stone. While neither the size of the site nor its abundance material suggest repeated residential usage, artifact diversity suggests that it may have served briefly temporary camp.

Reduction Stations

Confined with one exception to the slopes of the southwestern quadrant of the project area are ten small sites (Table 6) composed of light to heavy scatters of secondary debitage accompanied by occasional Stage I and Stage II bifaces. None appears to contain discrete activity loci other than a central concentration of chippage the density of which falls off rapidly over a radial distance of 10 m or less. The internal composition of most of these sites appears equivalent to that of individual loci within reduction complexes, from which they are distinguished chiefly by their isolation.

Table 6. Attributes of Reduction Stations.

	Debitage								
	Area	Debitage density	(I	Rel.	Freq	.)	Artif	acts	(Count)
Site	(sq. m)	(Max./sq. m)	P	S	Sh	T	C	BI	BII
26Ek3174	180	50	-	3	l	-	-		<u>-</u>
26Ek3175	80	50	-	3	1	-	-	1	-
26Ek3178	40	500	-	3	1	-	-	-	4
26Ek3179	310	100	-	3	1	-	-	-	2
26Ek3180	310	10	-	3	1	-	-	1	-
26Ek3181	180	100	-	3	1	-	-	2	1
26Ek3182	240	30	-	3	1	-	-	-	-
26Ek3183	20	100	-	3	1	1	-	1	1
26Ek3186	80	30	-	3	1	1		-	-
26Ek3187	20	20	-	3	1	-	-	1	-

P = Primary Flakes C = Core

S = Secondary Flakes BI = Stage I Biface Sh = Shatter BII = Stage II Biface

T = Tertiary Flakes

1 = Rare 2 = Common 3 = Dominant - = Not observed

Only site 26Ek3178, geographically apart from the other reduction stations, appears anomalous. While tightly clustered in a single locus, the site exhibits a vastly greater abundance and density of debitage than any other example of the type. Moreover, the incidence of Stage II bifaces is atypically high. Comparative debitage analysis of this assemblage and that of other reduction stations is warranted to determine whether other pattern regularities confirm the uniqueness of 26Ek3178.

Diffuse Lithic Scatters

The gradual slopes and undulating ridges of the project area's southeastern quadrant are devoid of lithic material sources, and are relatively far from water and habitation loci. Prehistoric activity within the area appears to have been neither intensive nor particularly recurrent. Three sites have been identified (Table 7), all of which are large, are characterized by diffuse scatters of secondary debitage, and lack discrete loci.

Table 7. Attributes of Diffuse Lithic Scatters.

Site	Area (sq. m)	Debitage density (Max./sq. m)		bit . F S	age req.) Sh	Arti C	facts BI	(Count) BII
26Ek3176	4,250	50	1	3	1	2	1	-
26Ek3194	8,850	2	-	3	1	-	•	
26Ek3199	1,200	10	1	3	1	5	1	•
	S = Seco Sh = Shat	ary Flakes ndary Flakes ter iary Flakes		=	Core Stage Stage			

1 = Rare 2 = Common 3 = Dominant - = Not observed

The rare occurrence of primary flakes and cores at 26Ek3176 and 26Ek3199 signals one of their qualitative differences from reduction stations. The materials suggest transport from nearby sources, perhaps the quarry pit complex 26Ek3200 200-300 m to the east.

Rockshelters

The silicified rims of the drainage gorge are pocked with natural cavities; all of those large enough to admit comfortable human passage appear to have been utilized prehistorically as sheltered reduction stations or, in one instance, as a temporary residential shelter. Additionally, the matrices of three provided sources of opalite nodules. Five rockshelters were recorded (Table 8).

Table 8. Attributes of Rockshelters.

Site	Area (sq. m)	Est. Depth of Deposit (cm)	Debitage density (Max./sq. m)		r t BI	i f a BII	cts Other	Lithic Source
26Ek3177	6	10	100		1	-	•	X
26Ek3202	39	10-20	10	1	1	-	•, ,	-
26Ek3204	56	50	300	4	17	1	9*	X
26Ek3205	24	10	5	2	-	-	-	. Х
26Ek3206	27	20	10	1	-	-	-	•

C = Core BII = Stage II Biface *Ground stone present
BI = Stage I Biface X = Lithic Source Present

The largest of the rockshelters, 26Ek3204, is also the most complex; it exhibits the greatest abundance of debitage, the greatest diversity of artifacts, and, probably, the deepest deposits. Among the artifacts noted on the surface, a drill, a scraper, and a mano suggest possible residential function. Tertiary flakes of obsidian were noted as well. The intact surface of the interior suggests that the site may retain evidence of spatially discrete behavior; two fragments of a mano were noted in immediate proximity, and three hammerstones (the only specimens of the class) were clustered likewise.

Significance Evaluations

Score

The significance of each site recorded in the U.S. Steel East project area was assessed to determine its potential eligibility for inclusion on the National Register of Historic Places. Assessments were based on quantitative ratings of the integrity and research significance of the sites, as measured in the emerging framework of regional research concerns generated by surveys (Elston et al. 1987; Budy 1988) and formal research design (Elston 1987). In order to ensure comparability with prior evaluations, and particularly with those applied to sites in the U.S. Steel West project area, the rating systems for integrity and research significance employed by Budy (1988:44-62) have been adopted here.

Integrity scores were assigned relative to the degree of surface disturbance observed; score equivalents are given in Table 9.

Table 9. Integrity Rating Scheme

1	Severely disturbed over <u>more than 50%</u> of site area. Disturbance may be a result of extensive erosion, numerous roads, drill
	pads, minerals exploration features, bulldozer cuts, or of artifact collection.

Scoring Standards

Moderately to heavily disturbed over less than 50% of total site area. Disturbance may be a result of erosion, roads, or minerals exploration, but significant portions of the site remain intact.

Scoring Standards

- Discrete, areal disturbance restricted to less than 25% of total site area. Disturbance may include a road or mining exploration feature as well as slopewash and rodent turbation.
- Essentially undisturbed. Minor disturbance may be a result of slopewash, trampling, or bioturbation.

Research significance scores were tallied from cumulative scores relative to quantity of material, clarity of site organization, and variety of data classes (Budy 1988:50). Score equivalents are given in Table 10.

Table 10. Research Significance Rating Scheme.

RESEARCH CRITERIA	SCORE
Quantity Measures	
1-10 items/sq. m.	1
>10-100 items/sq. m.	2
>100 items/sq. m.	3
Clarity Measures	
Isolated artifact	1
Undifferentiated spatially	2
Single activity locus	3
Multiple activity loci	4
Multiple activity loci/	
Possible residential features	5
Variety Measures	
Quarry Categories	
On-site opalite source	1
Quarry feature	1
Reduction Categories	
Cores	1
Stage I bifaces	1
Stage II bifaces	1
Stage III bifaces	1

Table 10, continued.

RESEARCH CRITERIA	SCORE
Specialized Activity Measures	
Groundstone	1
Hammerstones/cobble spalls	1
Basalt Biface Reduction Debitage	1
Obsidian	1
Specialized Tools	1
Total	Score

Results of the scoring exercise for each site are presented in Appendix A; they are summarized below.

The integrity of all sites in the project areas is superior; by the ratings defined in Table 9, 28 sites receive scores of 4, while 9 receive scores of 3. Most of the disturbance in the latter cases owes to roads and mining exploration, although the largest zone of disturbance observed in the project area, central to site 26Ek3170, was the consequence of heavy vehicle and equipment movement during a moist episode in the winter of 1987-1988. In this instance, however, the great size of the site (ca. 36,500 sq. m) allowed most of its data to emerge unimpaired. The National Register eligibility of no site in the project area, therefore, is diminished by low integrity.

The research significance of the U.S. Steel East sites ranges in score from 3 to 15. Applying the standards employed by Budy (1988) in the U.S. Steel West project area, sites scoring 4 or lower would be considered ineligible for nomination to the National Register, those scoring 10 higher would be regarded apparently eligible, and those scoring 5-9 would be considered of unclear eligibility. sites of the East project area, however, exhibit a notably higher mean score (8.84) than do those recorded in the West (6.83) when measured against the same objective criteria, we believe that the research potential of the area as a whole pitched somewhat higher. Wе suggest, therefore, translation of the raw research significance scores into measures of National Register eligibility appropriately defines a higher frame of reference; we believe that apparent profile of unique research significance excludes sites scoring 6 or lower from National Register eligibility, and suggests that sites scoring 11 or higher may be eligible for National Register nomination. Sites whose score falls in

the range 7-10 are regarded as of unclear eligibility, and require further assessment. Tables 11-17 array the integrity and research significance scores for all sites by category, and the consequent evaluation of their National Register eligibility.

Table 11. National Register Assessment of Quarry Pit Reduction Complexes.

Site	Integrity Score	Research Significance Score	National Register Eligibility
26Ek3170	3	13	Apparently Eligible
26Ek3171	3	12	Apparently Eligible
26Ek3195	4	12	Apparently Eligible
26Ek3197	4	11	Apparently Eligible
26Ek3200	4	11	Apparently Eligible

Mean Research Significance = 11.80

The class of Quarry pit/reduction complex exhibits the highest mean research significance rating within the project area. All sites of the class are considered potentially eligible for National Register consideration owing to their structural complexity, their abundance of cultural material, and the diversity of artifact types they contain.

Table 12. National Register Assessment of Outcrop Quarry/
Reduction Complexes.

Site	Integrity Score	Research Significance Score	National Register Eligibility
26Ek3191	4	7	Eligibility Unclear
26Ek3193	4	11	Apparently Eligible
26Ek3196	4	11	Apparently Eligible
26Ek3201	4	11	Apparently Eligible
26Ek3203	4	10	Eligibility Unclear

Mean Research Significance = 10.0

Outcrop quarry/reduction complexes score generally high in terms of research potential, and appear on the whole largely eligible for National Register nomination. Frequently, in fact, they exhibit greater abundances or higher

densities of cultural material than quarry pit/reduction complexes, although the diversity of their assemblages tends to be somewhat lower. Site 26Ek3191 is more diffuse than the other sites of the class, and is notably lower in both abundance and assemblage diversity.

Table 13. National Register Assessment of Large Reduction Complexes.

Site	Integrity Score	Research Significance Score	National Register Eligibility
26Ek3184	3-4	13	Apparently Eligible
26Ek3190	3	9	Eligibility Unclear
26Ek3192	4	12	Apparently Eligible
26Ek3198	4	13	Apparently Eligible

Mean Research Significance = 11.75

Large reduction complexes, owing to the number of discrete activity areas they exhibit, apparently representing repeated use of the same general area over long periods of time, contain not only high densities of debitage but frequently high diversities of artifact types. Site 26Ek3184 displays an especially high incidence of discrete flaking loci (more than 20), rendering it the most spatially complex site recorded in the project area.

Table 14. National Register Assessment of Small Reduction Complexes.

Site	Integrity Score	Research Significance Score	National Register Eligibility
26Ek3172	3	8	Eligibility Unclear
26Ek3173	4	8	Eligibility Unclear
26Ek3185	4	15	Apparently Eligible
26Ek3188	. 3	7	Eligibility Unclear
26Ek3189	3	8	Eligibility Unclear

Mean Research Significance = 11.50

The National Register eligibility of most reduction complexes is unclear; their research potential is not dismissable, as they exhibit frequent complexity in spatial structure and abundance of cultural material (chiefly debitage), although they generally display slight assemblage

diversity. Site 26Ek3185 constitutes a notable exception; apparently a short-term residential site, it exhibits one of the highest assemblage diversities noted in the project area. Its research significance, accordingly, is atypically high for the class.

Table 15. National Register Assessment of Reduction Stations.

Site	Integrity Score	Research Significance Score	National Register Eligibility
26Ek3174	4	6	Apparently Ineligible
26Ek3175	4	6	Apparently Ineligible
26Ek3178	4	7	Eligibility Unclear
26Ek3179	4	7	Eligibility Unclear
26Ek3180	4	6	Apparently Ineligible
26Ek3181	4	8	Eligibility Unclear
26Ek3182	3	7	Eligibility Unclear
26Ek3183	3	9 .	Eligibility Unclear
26Ek3186	4	5	Apparently Ineligible
26Ek3187	4	6	Apparently Ineligible

Mean Research Significance = 6.70

Half the small reduction stations recorded during the present effort appear so small, sparse, and homogenous that their research significance scores suggest ineligibility for National Register nomination. Among the remainder, measures of abundance or diversity suggest that useful information might be extracted through programmed testing or data recovery. Their National Register eligibility, therefore, remains to be assessed.

A special case is presented by site 26Ek3182, in which all evidence of cultural activity is disclosed in rodent mounds. Since this site, uniquely, is visible only in disturbed material recently brought to the surface, it seems important to assess the degree to which it, and perhaps other, similar locations, conceal cultural materials in subsurface contexts. Its research significance, therefore, has been inflated selectively owing to this anomaly (cf. Appendix B).

Table 16. National Register Assessment of Diffuse Lithic Scatters.

Site	Integrity Score	Research Significance Score	National Register Eligibility	
26Ek3176	4	6	Apparently Ineligible	
26Ek3194	4	3	Apparently Ineligible	
26Ek3199	4	5	Apparently Ineligible	

Mean Significance = 4.66

Ranking categorically lowest in research significance, diffuse lithic scatters appear ineligible for National Register nomination. Their low densities of cultural material, lack of discernible internal spatial organization, and very low assemblage diversity suggest that their potential data contribution to identified research issues (Elston 1987) would be minimal.

Table 17. National Register Assessment of Rockshelters.

Site	Integrity Score	Research Significance Score	National Register Eligibility
26Ek3177	4	9	Eligibility Unclear
26Ek3202	4	9	Eligibility Unclear
26Ek3204	4	14	Apparently Eligible
26Ek3205	4	6	Apparently Ineligible
26Ek3206	4	6	Apparently Ineligible

Mean Research Significance = 8.80

Two recorded rockshelters (26Ek3205 and 26Ek3206) appear to retain low data contents in both surface assemblages and estimated depths of deposit; neither is regarded eligible for National Register nomination. Site 26Ek3204, on the other exhibits both a highly diverse, abundant surface the promise of sufficient assemblage and depth that stratigraphic sorting of cultural materials retrievable; its National Register eligibility seems highly likely. The remaining rockshelters await further evaluation.

Summary and Recommendations: Of 37 prehistoric sites recorded in the U.S. Steel East project area, 13 are considered apparently eligible for nomination to the National Register of Historic Places, 10 are considered ineligible, evaluation eligibility of 14 requires further the proposed development of determination. Since ore processing facilities would entail potential impacts to all sites, it is recommended that a testing program initiated to record essential locational information for sites, to determine the significance of those sites National Register eligibility of which currently is unclear, and to confirm or deny the eligibility of those sites identified on the basis of survey data as apparently eligible inclusion on the Register. Such testing, conducted advance of project development, should define the parameters and extent of data recovery necessary to mitigate impacts the project is to proceed.

Table 18. Summary Recommendations

Site	Type	National Register Eligibility Status	Test	Confirm Location NFA*
26Ek3170	Quarry pit/reduction complex	Apparently eligible	X	
26Ek3171	Quarry pit/reduction complex	Apparently eligible	X	
26Ek3195	Quarry pit/reduction complex	Apparently eligible	X	
26Ek3197	Quarry pit/reduction complex	Apparently eligible	X	
26Ek3200	Quarry pit/reduction complex	Apparently eligible	X	
26Ek3191	Outcrop quarry/reduction complex	Unclear	Х	
26Ek3193	Outcrop quarry/reduction complex	Apparently eligible	X	
26Ek3196	Outcrop quarry/reduction complex	Apparently eligible	X	
26Ek3201	Outcrop quarry/reduction complex	Apparently eligible	X	
26Ek3203	Outcrop quarry/reduction complex	Unclear	X	
26Ek3184	Large reduction complex	Apparently eligible	X	
26Ek3190	Large reduction complex	Unclear	X	
26Ek3192	Large reduction complex	Apparently eligible	X	
26Ek3198	Large reduction complex	Apparently eligible	X	
26Ek3172	Small reduction complex	Unclear	X	
26Ek3173	Small reduction complex	Unclear	X	
26Ek3185	Small reduction complex	Apparently eligible	X	,
26Ek3188	Small reduction complex	Unclear	X	
26Ek3189	Small reduction complex	Unclear	X	
26Ek3174	Reduction station	Ineligible		X
26Ek3175	Reduction station	Ineligible		X
26Ek3178	Reduction station	Unclear	X	
26Ek3179	Reduction station	Unclear	X	
26Ek3180	Reduction station	Ineligible		X
26Ek3181	Reduction station	Unclear	X	
26Ek3182	Reduction station	Unclear	X	

Table 18, continued.

Site	Type	National Register Eligibility Status	Test	Confirm Location NFA*
26Ek3183	Reduction Station	Unclear	X	
26Ek3186	Reduction Station	Ineligible		X
26Ek3187	Reduction Station	Ineligible		X
26Ek3176	Diffuse lithic scatter	Ineligible		X
26Ek3194	Diffuse lithic scatter	Ineligible		X
26Ek3199	Diffuse lithic scatter	Ineligible		X
26Ek3177	Rockshelter	Unclear	X	
26Ek3202	Rockshelter	Unclear	X	
26Ek3204	Rockshelter	Apparently eligible	X	
26Ek3205	Rockshelter	Ineligible		X
26Ek3206	Rockshelter	Ineligible		. Х
		Total	27	10 37

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TOSAWIHI QUARRIES: ARCHAEOLOGICAL INVESTIGATIONS AND ETHNOGRAPHIC STUDIES IN NEVADA

Note:

One or more pages have been removed from this part of the report due to sensitivity of specific archaeological site location information. Qualified persons may contact the Nevada Bureau of Land Management, Elko Field Office, to inquire about obtaining additional information.

APPENDIX A: National Register Significance Evaluations

Temp. Site Number 363-1	Type Quany pit	reduction complex
Max. Area (sq.m.) Perm. S	ite # 26Ek 31	70
Integrity Score3	Research Value	Score <u>13</u>
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. > 10-100 items/sq. m. > 100 items/sq. m.	1 2 3	_3
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4	5
VARIETY MEASURES	_	
Quarry Categories On-site coalite source Quarry feature	3 1 1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1	

Temo. Site Number 636-2	Type <u>Q</u>	uzmy pit	/ reduction comple
Max. Area (sq.m.) Perm. S	ite #_2	6EK31	71
			Score 12
·		— 7, —) alle ann ann ann ann ann ann ann ann ann an
QUANTITY MEASURES	Point '	Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	i	1 2 3	_3
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activity loci Multiple reduction activity loci/ Possible residential features	; ;	1 2 3 4	<u>4</u>
VARIETY MEASURES			
Quarry Categories On-site coalite source Quarry feature		1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	-	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools		1 1 1 1	

Temp. Site Number 336-3	Type_S	mall reduce	tron complex
Max. Area (so.m.) Perm. S	ite #	26 EK 31	12
			Score <u>B</u>
QUANTITY MEASURES	Paint	Value	Score
1-10 items/sq. m. > 10-100 items/sq. m. > 100 items/sq. m.		1 2 3	
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features		1 2 3 4 5	_4
VARIETY MEASURES			,
Quarry Categories On-site coalite source Quarry feature		1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces		1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools		1 1 1 1	

Temp. Site Number 636-4	Type Small reduce	ction complex
Max. Area (sq.m.) Perm. S	Site # 26 Ek 31	73
. 1	Research Value	
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3	_3
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci Possible residential features	1 2 3 4 / 5	4
VARIETY MEASURES		
Quarry Categories On-site coalite source Quarry feature	1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1	

Temp. Site Number 636-5	Type Reduction	station_
Max. Area (so.m.) Perm. S	ite # 26 E 1631	74
Integrity Score Total	Research Value	Score 6
		•
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m.	1 2	
> 10-100 items/sq. m. > 100 items/sq. m.	3	
·		<u>Z</u>
CLARITY MEASURES		
Isolated artifact	i	
Undifferentiated spacially	2 3	
Single reduction activity locus Multiple reduction activity loci	ა 4	
Multiple reduction activity loci/	,	
Possible residential features	5	_3_
VARIETY MEASURES		
Quarry Categories		
On-site coalite source	1	-
Quarry feature	4	
Reduction Categories Cores	1	
Stage I bifaces	1	· · · · · · · · · · · · · · · · · · ·
Stage II bifaces	1	
Stage III bifaces	1	
Specialized Activity Measures		
Groundstone Basalt Hammerstones/cobble spalls	1 5 1	
Basalt Biface Reduction Debitage	i 1	
Exotic Obsidian	i	
Specialized Tools	1	and the few sections

Temo. Site Number 636-6	Type Reduction	on station
Max. Area (so.m.) Perm. S	ite # 26Ek31	75
. 1	Research Value	
		J
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m.	1	
)10-100 items/sq. m.	2	
)100 items/sq. m.	3	2
CLARITY MEASURES		
Isolated artifact	1	
Undifferentiated spacially	2	
Single reduction activity locus	3	
Multiple reduction activtiy loci	4	
Multiple reduction activtly loci/		7
Possible residential features	5	<u> </u>
VARIETY MEASURES		
Quarry Categories		
On-site coalite source	1	
Quarry feature	1	
Reduction Categories		
Cores	1	
Stage I bifaces	1	
Stage II bifaces	1	
Stage III bifaces	1	عدان جوين بالقد فندن
Specialized Activity Measures		
Groundstone	1	from street regards regards and the
Basalt Hammerstones/cobble spalls	1	
Basalt Biface Reduction Debitage	1	
Exotic Obsidian	1	
Specialized Tools	1	

Temp. Site Number <u>136-7</u>	Туре	offuse li	Hur s	cetter
Max. Area (sq. m.) Perm. S	ite #	26 Ek 31	7le	
. 1		ch Value	•	·le
· · · · · · · · · · · · · · · · · · ·				, _, <u>_,</u>
QUANTITY MEASURES	Point	Value	Score	
1-10 items/sq. m. > 10-100 items/sq. m. > 100 items/sq. m.		1 2 3	_2_	
CLARITY MEASURES		•		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features		1 2 3 4		
VARIETY MEASURES				
Quarry Categories On-site coalite source Quarry feature		1	مثلة فيناه موجد أخد موجد موالة عرب محمد أخد مرجد	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces		1 1 1		
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools		1 1 1 1		

Temo. Site Number 636-8	Type Rockshelt	er/lithic source
Max. Area (sq.m.) Perm. S	ite # 26Ek31	<u> </u>
Integrity Score	Research Value	Score <u>9</u>
		•
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. > 10-100 items/sq. m. > 100 items/sq. m.	1 2 3	_3
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activity loci Multiple reduction activity loci/ Possible residential features	1 2 3 4 5	_3
VARIETY MEASURES		
Quarry Categories On-site coalite source Quarry feature	1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1	

Temp. Site Number 126-9	Type Reduction Station		
Max. Area (sq.m.) Perm. S	ite #	26 Ek 317	8
1			Score
			•
QUANTITY MEASURES	Point	Value	Score
1-10 items/sq. m.		<u>i</u>	
> 10-100 items/sq. m.		2	
)100 items/sq. m.		3	3
CLARITY MEASURES			
Isolated artifact		1	•
Undifferentiated spacially		2	
Single reduction activity locus		3	
Multiple reduction activtly loci		4	
Multiple reduction activtiy loci/		_	2
Possible residential features		5	
VARIETY MEASURES			
Quarry Categories			
On-site coalite source		1	
Quarry feature		1	
Reduction Categories			
Cores		1	
Stage I bifaces		1	
Stage II bifaces Stage III bifaces		1	
Stage III biraces		•	
Specialized Activity Measures			
Groundstone		1	
Basalt Hammerstones/cobble spalls		1	
Basalt Biface Reduction Debitage		1	
Exotic Obsidian		1	
Specialized Tools		1	

Temo. Site Number 636-10	Type \widehat{K}	eduction.	station
Max. Area (sq.m.) Perm. S	ite # <u>2</u>	6EL317	<u>1</u>
.1		ch Value 9	
QUANTITY MEASURES	Point	Value	Score
1-10 items/sq. m.		1	
)10-100 items/sq. m.		2	
)100 items/sq. m.		3	3
CLARITY MEASURES			
Isolated artifact		1	
Undifferentiated spacially		2	
Single reduction activity locus		3	
Multiple reduction activity loci		4	
Multiple reduction activity loci/			
Possible residential features		5	3
VARIETY MEASURES			
Quarry Categories			
On-site coalite source		1 .	
Quarry feature		1	
Reduction Categories			
Cores		1	
Stage I bifaces		1	
Stage II bifaces		1	
Stage III bifaces		1	
Specialized Activity Measures			
Groundstone	•	1	
Basalt Hammerstones/cobble spalis		1	
Basalt Biface Reduction Debitage		1	
Exotic Obsidian		1	
Specialized Tools		1	

Temp. Site Number 636-11	Type	Reduction	station
Max. Area (sq.m.) Perm. S:	ite #_2	LLEK319	BO
11		h Value 9	,
, , , , , , , , , , , , , , , , , , ,			
QUANTITY MEASURES	Point	Value	Score
1-10 items/sq. m.		1	•
)10-100 items/sq. m.		2	
)100 items/sq. m.		3	2_
CLARITY MEASURES			
Isolated artifact		1	
Undifferentiated spacially		2	
Single reduction activity locus		3	
Multiple reduction activtiy loci		4	
Multiple reduction activtiy loci/ Possible residential features		5	3
VARIETY MEASURES			
Quarry Categories			
On-site coalite source		1	
Quarry feature		1	
Reduction Categories			
Cores		1	
Stage I bifaces Stage II bifaces		1	
Stage III bifaces		ī	
Specialized Activity Measures			
Groundstone		1	
Basalt Hammerstones/cobble spalls		1	
Basalt Biface Reduction Debitage		1	
Exotic Obsidian Specialized Tools		1	
obecigiised (0012		•	

Temp. Site Number <u>L3L-12</u>	Type <u>Red</u>	uchin stati	on
Max. Area (sq.m.) Perm. S	ite # 26	EK3181	
Integrity Score Total	Research	Value Score _	8
	. <u></u>		
QUANTITY MEASURES	Point Va	lue Score	
1-10 items/sa. m. >10-100 items/sa. m. >100 items/sa. m.	1 2 3	_3	
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci Possible residential features	1 2 3 4 ,	_3	
VARIETY MEASURES			
Quarry Categories On-site coalite source Quarry feature	1		
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1		
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1		

Temp. Site Number 636-13	Type Reduction	1 Station
Max. Area (so.m.) Perm. S		
Integrity Score 3 Total	Research Value	Score <u>5 (*</u> 7)
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3	_2
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4 5	3
VARIETY MEASURES		
Quarry Categories On-site coalite source Quarry feature	1 1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	Approximate resign colors residently grams colors residently Table colors residently Grams colors residently Grams colors residently
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1	

^{*} NB: Exposore of site confined to rodent mounds, thus may be largely buried; add 2 discretioning points.

Temp. Site Number 636-14	Type Redu	uction station
Max. Area (sq. m.) Perm. S:	ite # 26 E	k3183
		alue Score 9
		; ,
·		
QUANTITY MEASURES	Point Val	ue Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3	_3
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activity loci Multiple reduction activity loci/ Possible residential features	1 2 3 4 5	_3_
VARIETY MEASURES		•
Quarry Categories On-site coalite source Quarry feature	1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1	

Temp. Site Number 636-15	Type Linge redu	ection complex
Max. Area (so.m.) Perm. S	ite # 26 Ek 3	184
Integrity Score 3-4 Total	Research Value	Score 13
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3	_3
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4	4
VARIETY MEASURES	,	
Quarry Categories On-site coalite source Quarry feature	1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Easalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	i 1 1 1	

Temp. Site Number 636-16	Type <u>Small redu</u>	ection complex
Max. Area (sq. m.) Ferm. S	ite # 26 ElC3	185
Integrity Score Total	Research Value	Score <u>15</u>
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3.	3
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4 5	_5
VARIETY MEASURES		
Quarry Categories On-site coalite source Quarry feature	1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1	

Temp. Site Number 636-17	Typeß	eduction:	station
Max. Area (so.m.) Perm. S	ite # 2	LEK318	ما
Integrity Score Total	Researc	h Value S	Score <u>5</u>
			•
QUANTITY MEASURES	Paint	Value	Score
1-10 items/sq. m.		1	
> 10-100 items/sq. m. > 100 items/sq. m.		2 3	
/100 loems/sq. m.		J	2
CLARITY MEASURES			
Isolated artifact		1	
Undifferentiated spacially		2 3	
Single reduction activity locus Multiple reduction activity loci		ა 4	
Multiple reduction activtiy loci/			
Possible residential features		5	_3
VARIETY MEASURES			
Quarry Categories			
On-site opalite source		1	
Quarry feature			
Reduction Categories		_	
Cores Stace I bifaces		1	
Stage II bifaces		i	
Stage III bifaces		1	me any ann side tra
Specialized Activity Measures			
Groundstone		1	
Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage		1	
Exotic Obsidian		1	
Specialized Tools		1	
•			

Temo. Site Number (36-19	Type_	Reduction	station
Max. Area (so.m.) Perm. S	ite #	26 EK318	<u> </u>
Integrity Score 4 Total	Resear	ch Value	Score 6
			سند سبة ۱۹۷۸ اخت بنده بيود چنيه سبد بيده بيده بيده بيده بيده بيده
			•
QUANTITY MEASURES	Point	Value	Score
1-10 items/sq. m.		1	
> 10-100 items/sq. m. > 100 items/sq. m.		2	
, 100 100		_	
CLARITY MEASURES			
Isolated artifact	-	1	
Undifferentiated spacially		2	
Single reduction activity locus Multiple reduction activity loci		3	
Multiple reduction activity loci/		•	,
Possible residential features		5	_3
VARIETY MEASURES			
Quarry Categories			
On-site coalite source		1	an
Quarry feature		1	
Reduction Categories			
Cores		1	
Stage I bifaces Stage II bifaces	•	1	
Stage III bifaces		1	
Specialized Activity Measures			
Groundstone		1	
Basalt Hammerstones/cobble spalls		1	
Basalt Biface Reduction Debitage Exotic Obsidian		1	
Specialized Tools		1	

Temp. Site Number 436-20	Type Small reduce	time complex
Max. Area (sq.m.) Perm.	Site # 26 EK 31	86
Integrity Score 3 Total	. Research Value	Score
		• .
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m.	1	
)10-100 items/so. m.	2	
)100 items/sq. m.	3	_2
CLARITY MEASURES		
Isolated artifact	1	
Undifferentiated spacially	2	0
Single reduction activity locus	3	
Multiple reduction activity loci	. 4	
Multiple reduction activity loci	./	
Possible residential features	5	_4
VARIETY MEASURES		
Quarry Categories		
On-site coalite source	1	
Quarry feature	1	
Reduction Categories		
Cores	1	
Stage I bifaces	1	
Stage II bifaces Stage III bifaces	1	
-	•	جه خص مینی ب ست می ین
Specialized Activity Measures		
Groundstone	1	
Basalt Hammerstones/cobble spall		
Basalt Biface Reduction Debitage		
Exotic Obsidian	i	
Specialized Tools	1	

Temp. Site Number 636-21	Type Small reduce	tion complex
Max. Area (so.m.) Perm. S	ite # 26 E/2318	39
Integrity Score 3 Total	Research Value 9	Score <u>8</u>
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3	_2
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4	ď
VARIETY MEASURES	<u>-</u>	
Quarry Categories On-site coalite source Quarry feature	1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1	

Temp. Site Number 636-22	Type Large reduc	tron complex
Max. Area (sq.m.) Perm. S	3ite # 26Ek319	<u>6</u>
Integrity Score 3 Total	Research Value S	core 9
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3	<u> </u>
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci Possible residential features	1 2 3 4 / 5	4
VARIETY MEASURES		
Quarry Categories On-site coalite source Quarry feature	1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	i 1 1 1	

SIGNIFICANCE EVALUATION CA	RITERIA DATA SHE	EET ,	
	Type Outerop qu		ucho
Max. Area (sq.m.) Perm. S	ite # 26 Ek3	191	
	Research Value		<u> </u>
QUANTITY MEASURES	Point Value	Score	
WORK TIT MEASURES	PC2110 VCC2CC	0.0.	
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3		
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4 ,	2_	
VARIETY MEASURES			
Quarry Categories On-site coalite source Quarry feature	1		
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1		
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1		

Temo. Site Number 636-24	Type	arge red	uction	complex
max. Area (sq.m.) Perm. S	ite #_2	26E1C3	192	
Integrity Score 4 Total			•	12
QUANTITY MEASURES	Paint	Value	Score	
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.		1 2 3	3	
CLARITY MEASURES				
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	-	1 2 3 4	<u>4</u>	
VARIETY MEASURES				
Quarry Categories On-site coalite source Quarry feature		1		
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces		1 1 1		
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools		1 1 1 1		

Temp. Site Number 636-25	Type Outerop	guamy_
Max. Area (sq.m.) Perm. S	ite # 26Ek 310	13
•	Research Value (
Though Toy Door C		
	و ۱۹۵۱ ماید و ۱۹۱۱ میل کنید دیده میل کنید و ۱۹۱۱ میل میلید و ۱۹۱۱ میلید و ۱۹۱۱ میلید و ۱۹۱۱ میلید و ۱۹۱۱ میلید	
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m.	1	
)10-100 items/sq. m.	2	•
)100 items/sq. m.	3	3
CLARITY MEASURES		
Isolated artifact	1	
Undifferentiated spacially	2	
Single reduction activity locus	3	
Multiple reduction activity loci	4	
Multiple reduction activtiy loci/		11
Possible residential features	5	7
VARIETY MEASURES		
Quarry Categories		
On-site coalite source	1	l
Quarry feature	1	
Reduction Categories		
Cores	1	
Stage I bifaces	1	
Stage II bifaces	1	
Stage III bifaces	1	
Specialized Activity Measures		
Groundstone	1	
Basalt Hammerstones/cobble spalls	1	
Basalt Biface Reduction Debitage	1	
Exotic Obsidian	1	
Specialized Tools	1	

SIGNIFICANCE EVALUATION CRITERIA DATA SHEET Type Diffuse littlic scotter Temp. Site Number 636-26 Perm. Site # 26 Ek 3194 Max. Area (so.m.) Total Research Value Score 3 Integrity Score _ Point Value QUANTITY MEASURES Score 1-10 items/sq. m. 1 >10-100 items/sq. m. 2)100 items/sq. m. CLARITY MEASURES Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtly loci Multiple reduction activtiy loci/ Possible residential features

VA

Possible residential reactives	3	
ARIETY MEASURES		
Quarry Categories		
On-site coalite source	1	
Quarry feature	1	,
Reduction Categories		•
Cores	1	
Stage I bifaces	1	
Stage II bifaces	1	
Stage III bifaces	1	
Specialized Activity Measures		*
Groundstone	1	
Basalt Hammerstones/cobble spalls	1	
Basalt Biface Reduction Debitage	1	
Exotic Obsidian	1	
Specialized Tools	1	

SIGNIFICANCE EVALUATION CR		,
Temo. Site Number 636-27	Type Quany	pit/reduction
Max. Area (sq.m.) Perm. S:	ite # 26 Ek 3	195
Integrity Score Total	Research Value	Score 12
***	ng and spin to the spin told two state that state the spin told the spin	
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3	_3
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activity loci Multiple reduction activity loci/ Possible residential features	1 2 3 4 5	4
VARIETY MEASURES		
Quarry Categories On-site coalite source Quarry feature	1 1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1	

SIGNIFICANCE EVALUATION CR	ITERIA	DATA SHE	ET /
Temp. Site Number 636-28	Type_0	<u>utcrop qu</u>	12my/reduct
Max. Area (sq.m.) Perm. S	ite #_2	26 EK3	196e
Integrity Score			
QUANTITY MEASURES	Point	Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.		1 2 3	_3
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activity loci Multiple reduction activity loci/ Possible residential features		1 2 3 4	4
VARIETY MEASURES		J	
Quarry Categories On-site coalite source Quarry feature		1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces		1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools		1 1 1 1	

Temo. Site Number 636-29	Type Quam pit ite # 26 Ek 3	-/ reduction
Max. Area (sq.m.) Perm. S:	ite # 26Ek3	197
, 1	Research Value	
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. > 10-100 items/sq. m. > 100 items/sq. m.	1 2 3	3
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4 5	4
VARIETY MEASURES		,
Quarry Categories On-site coalite source Quarry feature	1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1	

Temo. Site Number <u>636-30</u>			uction complex
Max. Area (sq.m.) Perm. S	ite #_	26 EK 3	198
Integrity Score Total	Resear	ch Value	Score <u>13</u>
QUANTITY MEASURES	Paint	Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.		1 2 3	3_
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features		1 2 3 4	<u>.4</u>
VARIETY MEASURES		ζ.	
Quarry Categories On-site coalite source Quarry feature		1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces		1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools		1 1 1 1	

Temp. Site Number 636-31	Type DIFF	ise litture :	scatter
Max. Area (sq.m.) Perm. S	ite # 268	EK3199	,
Integrity Score 4 Total	Research Va	lue Score _	5
	يست هين مين المن المن المن المن المن المن المن الم		,
QUANTITY MEASURES	Point Valu	e Score	
1-10 items/sq. m. > 10-100 items/sq. m. > 100 items/sq. m.	1 2 3		
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4 5	2	
VARIETY MEASURES			
Quarry Categories On-site coalite source Quarry feature	1		
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1 1		: ·
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1		

SIGNIFICANCE EVALUATION CRITERIA DATA SHEET ,			
Temp. Site Number 636-32	Type Quarry P	it/reduction	
Max. Area (so.m.) Ferm. S	ite # 26Ek 3	3200	
/ 1	Research Value	. 1	
		. •	
QUANTITY MEASURES	Point Value	Score	
1-10 items/sq. m. > 10-100 items/sq. m. > 100 items/sq. m.	1 2 3	_3	
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4 5	4	
VARIETY MEASURES			
Quarry Categories On-site coalite source Quarry feature	1 1		
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1		
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1		

SIGNIFICANCE EVALUATION CR			
Temp. Site Number <u>636-33</u> Max. Area (sq.m.) Perm. S	Type Outcrop	queny/redu	iction compl
Max. Area (sq.m.) Perm. S	ite # 26 Ek	<u> 3201</u>	
Integrity Score 4 Total	Research Valu		
		ه خلفهٔ ۱۳۰۰ خلفه میباد خلف شد. جمع نیباد <u>سد. میباد ن</u> ده با	-
QUANTITY MEASURES	Point Value	Score	
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3	_3_	
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4 5	4	
VARIETY MEASURES			
Quarry Categories On-site opalite source Quarry feature	1		
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	<u>{</u>	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1		·

Temp. Site Number 636-34	Type_	Rockshe	lter
Max. Area (sq.m.) Perm. S	ite #	26 Elis	202
Integrity Score _4 Total	Resear	ch Value	Score 7 (*9)
QUANTITY MEASURES	Point	Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.		1 2 3	2
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features		1 2 3 4 5	_3
VARIETY MEASURES			
Quarry Categories On-site coalite source Quarry feature		1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces		1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools		1 1 1 1	

Total Score

* Evident depth of deposit; edd 2 points

Temp. Site Number <u>636-35</u>	Type Outrop guarry/red	luction con
Max. Area (sq.m.) Perm. S	ite # 26EL3203	
Integrity Score _4 Total	Research Value Score	0
		ands were ands were then
QUANTITY MEASURES	Point Value Score	
1-10 items/sq. m.	1	
>10-100 items/sq. m.	2	
)100 items/sq. m.	3 _3	
CLARITY MEASURES		
Isolated artifact	· 1	
Undifferentiated spacially	2	
Single reduction activity locus	3	
Multiple reduction activity loci	4	
Multiple reduction activtiy loci/ Possible residential features	5 4	ŕ
VARIETY MEASURES		
Quarry Categories	4	
On-site coalite source	1	
Quarry feature	1	
Reduction Categories	,	
Cores	1	
Stage I bifaces	1	•
Stage II bifaces	1	
Stage III bifaces	1	
Specialized Activity Measures		
Groundstone	1	
Basalt Hammerstones/cobble spalls		
Basalt Biface Reduction Debitage	1	
Exotic Obsidian	<u> </u>	
Specialized Tools	1	

SIGNIFICANCE EVALUATION CRITERIA DATA SHEET			
Temo. Site Number 636-36	Type Rockshe	Her/Ithic	
Max. Area (sq.m.) Perm. S:	ite # 26 Elc3	204	
,	Research Value	.,14	
		رين مين مين مين مين مين مين مين مين مين م	
QUANTITY MEASURES	Point Value	Score	
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3	3_	
CLARITY MEASURES			
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activity loci Multiple reduction activity loci/ Possible residential features	1 2 3 4	3	
VARIETY MEASURES			
Quarry Categories On-site coalite source Quarry feature	1		
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1		
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1		

* Note probable residential function (not scored)

SIGNIFICANCE EVALUATION CRITERIA DATA SHEET		
Temp. Site Number 636-37	Type Rocksh	elter/lithurc
Max. Area (sq.m.) Perm. S:	ite # 26 EK3	205
Integrity Score 4 Total !	Research Value	Score <u>(</u>
	955 mark class class class class class (mar can can can can can can	4
QUANTITY MEASURES	Point Value	Score
1-10 items/sq. m. >10-100 items/sq. m. >100 items/sq. m.	1 2 3	
CLARITY MEASURES		
Isolated artifact Undifferentiated spacially Single reduction activity locus Multiple reduction activtiy loci Multiple reduction activtiy loci/ Possible residential features	1 2 3 4	3_
VARIETY MEASURES		
Quarry Categories On-site coalite source Quarry feature	1 1	
Reduction Categories Cores Stage I bifaces Stage II bifaces Stage III bifaces	1 1 1	
Specialized Activity Measures Groundstone Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage Exotic Obsidian Specialized Tools	1 1 1 1	

Temp. Site Number 636-38	TypeRockshelter	
Max. Area (sq.m.) Perm. S	ite # 26E	K3206
		lue Score <u>(e</u>
·		•
QUANTITY MEASURES	Point Value	e Score
1-10 items/sq. m.	1	
)10-100 items/sq. m.)100 items/sq. m.	2	0
·		
CLARITY MEASURES		
Isolated artifact	1	
Undifferentiated spacially	2 3	•
Single reduction activity locus Multiple reduction activtiy loci	ა 4	
Multiple reduction activity loci/	•	
Possible residential features	5	3
VARIETY MEASURES		
Quarry Categories		
On-site coalite source	1	
Quarry feature	1	
Reduction Categories	•	1
Cores Stage I bifaces	1	
Stage II bifaces	í	, , , , , , , , , , , , , , , , , , ,
Stage III bifaces	1	
Specialized Activity Measures		
Groundstone	1	·
Basalt Hammerstones/cobble spalls Basalt Biface Reduction Debitage	1	
Exotic Obsidian	i	
Specialized Tools	1	
•		,

APPENDIX B: Intermountain Antiquities Computer System Site Records

(Bound in a separate volume)